CLAIMS

1 - A method for preparing a peptide or a peptide derivative comprising at least two enantiopure amino acids and at least one glycine molecule, comprising the production of a peptide of general formula

$$R^1R^2NCH_2\text{-}C(=O)\text{-}HN\text{-}A\text{-}COOH \qquad (I)$$

in which A denotes a peptide chain comprising at least two enantiopure amino acids; and R^1 and R^2 are chosen, independently, from H or alkyl, alkenyl and aryl which are optionally functionalized, a peptide and a nucleic acid, or R^1 and R^2 together form a cycloalkyl or cycloheteroalkyl substituent, by reacting a compound of general formula

$$XCH_2\text{-}C(=O)\text{-}HN\text{-}A\text{-}COOY \quad (II)$$

in which X denotes a group which can be substituted by nucleophilic substitution, chosen in particular from Cl and Br, and Y is chosen from H and cations, A has the same meaning as in formula (I); with a compound of general formula

$$HNR^1R^2 \qquad (III)$$

in which R^1 and R^2 have the same meaning as in formula (I).

2 - The method according to Claim 1, in which the reaction is carried out in a liquid medium containing at least 25% by weight, relative to the total weight of the liquid medium, of compound of general formula (III).

3 - The method according to Claim 2, in which the liquid medium contains at least 30% by weight of compound of general formula (III).

4 - The method according to Claim 1, in which the reaction is carried out in a liquid medium in which a concentration of the compound of general formula (II) of less than or equal to 10% by weight, relative to the total weight of the liquid medium, is maintained.

5 - The method according to Claim 1, in which the reaction is carried out at a temperature of -30°C to +60°C.

6 - The method according to Claim 1, in which the compound of general formula (III) is aqueous ammonia.

7 - The method according to Claim 1, in which A denotes a peptide chain made up of 2 to 20 amino acids.

8 - The method according to Claim 1, in which the compound of general formula (III) is a compound corresponding to general formula (I), at least R^2 in

the compound of general formula (III) is H, A is identical in the compound of general formula (II) and in the compound of general formula (III), and the product obtained is a peptide derivative of general formula

$$R^1N(CH_2\text{-}C(=O)\text{-}HN\text{-}A\text{-}COOH)_2 \qquad (IV)$$

in which A denotes a peptide chain comprising at least 2 enantiopure amino acids; and R^1 is chosen from H, alkyl, alkenyl and aryl, which are optionally functionalized, a peptide or a nucleic acid.

9 - The method according to Claim 1, comprising the production of the compound of general formula (II) by peptide coupling of a fragment of general formula

$$XCH_2\text{-}C(=O)\text{-}HN\text{-}B \qquad (VI)$$

in which X denotes a group which can be substituted by nucleophilic substitution, chosen in particular from Cl and Br, and B denotes an amino acid or a peptide chain optionally bearing protective and/or activating groups, with a fragment C also denoting an amino acid or a peptide chain optionally bearing protective and/or activating groups.

10 - The method according to Claim 9, in which B denotes an amino acid.

11 - The method according to Claim 9, in which fragment C is a persilylated amino acid or a persilylated peptide chain.

12 - The method according to any one of Claims 1 to 11, in which the group A of the compound of general formula (II) is Phe-Leu-Gly.

13 - A peptide derivative of general formula

$$R^1N(CH_2\text{-}C(=O)\text{-}HN\text{-}A\text{-}COOH)_2 \qquad (IV)$$

in which A denotes a peptide chain comprising at least 2 enantiopure amino acids; and R^1 is chosen from H, alkyl, alkenyl and aryl, which are optionally functionalized, a peptide or a nucleic acid.

14 - A peptide derivative according to Claim 13, in which the group A is chosen from Phe-Leu and Phe-Leu-Gly.

15 - A peptide derivative of general formula

$$R^1N(CH_2\text{-}C(=O)\text{-}HN\text{-}A1\text{-}COOH)(CH_2\text{-}C(=O)\text{-}HN\text{-}A2\text{-}COOH) \quad (V)$$

in which A1 and A2 denote different peptide chains, and A1 or A2 comprises at least 2 enantiopure amino acids and R^1 is chosen from H, alkyl, alkenyl and aryl, which are optionally functionalized, a peptide or a nucleic acid.

16 - The peptide derivative according to Claim 15, wherein A1 or A2 is chosen from Phe-Leu and Phe-Leu-Gly.

17 – A pharmaceutical composition comprising a peptide derivative according to any one of Claims 13 to 16.

18 - A compound of general formula

$$XCH_2\text{-}C(=O)\text{-}HN\text{-}A\text{-}COOY \quad (II)$$

in which X denotes a group which can be substituted by nucleophilic substitution, chosen in particular from Cl and Br, and Y is chosen from H and cations, and A denotes a peptide chain made up of 2 to 20 amino acids, comprising at least 2 enantiopure amino acids.

19 - A method for producing the compound of general formula (II) according to Claim 18, by peptide coupling a fragment of general formula

$$XCH_2\text{-}C(=O)\text{-}HN\text{-}B \quad (V)$$

in which X denotes a group which can be substituted by nucleophilic substitution, chosen in particular from Cl and Br, and B denotes an amino acid or a peptide chain optionally bearing protective and/or activating groups, with a fragment C also denoting an amino acid or a peptide chain optionally bearing protective and/or activating groups.

20 - The method according to Claim 18, in which B denotes an amino acid.

21 - The method according to Claim 19 or 20, in which fragment C is a persilylated amino acid or a persilylated peptide chain.